CLIENT : BRUHATH BENGALURU MAHANAGARA PALIKE

Executive Engineer

Bytarayanapura Division

Bengaluru

NAME OF WORK: PACKAGE NO-6 (CONSIST OF 14 WORKS)

3rd & Part Bill
Measurement Book

Job Number :- 009-23-000003

Agency :- M/s.SMLP Asphalts,Prop. Sri B B Umesha,

Estimate Cost :- 1500.00 lakhs

BRUHAT BENGALURU MAHANAGARA PALIKE

MEASUREMENT SHEET

RA 3RD AND PART BILL

Name of work: Package No. 06 (Consists of 14 Works)

Estimated Cost: Rs. 1500.00 Lakhs

Job Code: 009-23-000003

Head of Account : P-3877 Amruth Nagarothana Works

Name of Agency: M/s.SMLP Asphalts,Prop. Sri B B Umesha, No 1265,Next to Andhra Bank, Major Sandeep Unnikrishnan Road, Yalahanka New Town, Bengaluru-560064.

Work order No: BBMP/EE/BTP/WO/76/2022-23 Dated: 24-11-2022.

Measurements Recarded on :

Sl No	Chainage	Mesurement No.	L	B1	B2	Av.,B	D	Qty	Rate / Unit	Amount
1	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead I By Manual Means B Cement Concrete Grade M-15 & M-20								Sqm	
	Qty as per Premeasurement vide E-MB Page No. 01 is =							**19.20**	844.14	**16207.00**
2	Removing and refixing stone slabs of drains and pointing in CM (1:3) (Data Rate)								Sqm	
	Qty as per Premeasurement vide E-MB Page No. 02 is =							**183.60**	127.03	**23323.00**
4	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work.								Cum	
	Qty as per Premeasurement vide E-MB Page No. 03 to 05 is =							**998.60**	214.79	**214489.00**
5	Providing granite slabs of selected quality roughly dressed having a size of 7.5cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.								Sqm	
	IECHS Layout Shiva Temple Road									
	LHS									
		1	5.00	1.35	1.35	1.35		6.75		
		1	2.50	1.35	1.35	1.35		3.38		
		1	3.80	1.35	1.35	1.35		5.13		
		1	5.50	1.35	1.35	1.35		7.43		
		1	5.50	1.35	1.35	1.35		7.43		
		1	2.20	1.35	1.35	1.35		2.97		
		1	1.80	1.35	1.35	1.35		2.43		
		1	3.50	1.35	1.35	1.35		4.73		
	RHS									
		1	3.80	1.35	1.35	1.35		5.13		
		1	5.10	1.35	1.35	1.35		6.89		
		1	6.40	1.35	1.35	1.35		8.64		

Sl No	Chainage			Mesurement					Qty	Rate / Unit	Amount
				No.	L	B1	B2	Av.,B	D			
				1	4.60	1.35	1.35	1.35		6.21		
				1	4.10	1.35	1.35	1.35		5.54		
				1	3.90	1.35	1.35	1.35		5.27		
				1	2.30	1.35	1.35	1.35		3.11		
					3rd Part Bill Qty					81.00	778.95	63095.00

Assistant Engineer
Ward No. 09

Assistant Executive Engineer
Vidyaranyapura Sub Division

Mecadez Core Technologies Private Limited

Sl No	Chainage			Mesurement No.	L	B1	B2	Av.,B	D	Qty	Rate / Unit	Amount
	Measurements Recarded on :											
8	Providing and laying in position plain cement concrete Mix 1:3:6 (M10) for levelling course for all works in foundation. Using 40 mm nominal size graded crushed coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications.										Cum	
	Qty as per Premeasurement vide E-MB Page No. 06 to 07 is =									125.10	6413.65	802348.00
9	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. M20 (The cost of steel reinforcement & formwork to be paid separately)										Cum	
	Qty as per Premeasurement vide E-MB Page No. 08 to 11 is =									279.34	7236.31	2021391.00
10	Supplying, Fitting and Placing TMT Fe550 bar Reinforcement in sub-structure complete as per Drawing and Technical and as per the Direction of engineer incharge of work										Cum	
	Qty as per Premeasurement vide E-MB Page No. 12 to 13 is =									19.58	106436.07	2084018.00
13	Providing and Fixing pre cast covering Slab 100mm thick made out of CC, Jelly 20mm Down Size with steel reinforcement including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc, complete as per Engineer incharge.										Sqm	
	NTI Layout											
	20th main road											
	LHS											
	22.00	52.00		1	30.00			0.90		27.00		
	52.00	59.00		1	7.00			0.90		6.30		
	72.00	93.00		1	21.00			0.90		18.90		
	101.00	126.00		1	25.00			0.90		22.50		
	131.00	136.00		1	5.00			0.90		4.50		
	136.00	145.00		1	9.00			0.90		8.10		
	145.00	151.00		1	6.00			0.90		5.40		
	161.00	187.00		1	26.00			0.90		23.40		
	187.00	217.00		1	30.00			0.90		27.00		
	217.00	225.00		1	8.00			0.90		7.20		
	RHS											
	22.00	52.00		1	30.00			0.90		27.00		
	52.00	65.00		1	13.00			0.90		11.70		
	65.00	82.00		1	17.00			0.90		15.30		
	82.00	93.00		1	11.00			0.90		9.90		
	93.00	104.00		1	11.00			0.90		9.90		
	111.00	136.00		1	25.00			0.90		22.50		
	136.00	149.00		1	13.00			0.90		11.70		
	149.00	170.00		1	21.00			0.90		18.90		
	176.00	187.00		1	11.00			0.90		9.90		
	195.00	222.00		1	27.00			0.90		24.30		
	8th Main road											
	RHS											
	0.00	30.00		1	30.00			0.90		27.00		
	31.50	39.50		1	8.00			0.90		7.20		
	39.50	44.50		1	5.00			0.90		4.50		

Sl No	Chainage			Mesurement						Qty	Rate / Unit	Amount
				No.	L	B1	B2	Av.,B	D			
	49.00	79.00		1	30.00			0.90		27.00		
	82.00	101.00		1	19.00			0.90		17.10		
	106.00	130.00		1	24.00			0.90		21.60		
	136.00	158.00		1	22.00			0.90		19.80		
	158.00	165.00		1	7.00			0.90		6.30		
	165.00	179.00		1	14.00			0.90		12.60		
	IECHS Layout											
	3RD E CROSS (SHIVA TEMPLE ROAD)											
	LHS											
	0.00	17.00		1	17.00			0.90		15.30		
	3RD E CROSS (SHIVA TEMPLE ROAD)											
	RHS											
	0.00	25.00		1	25.00			0.90		22.50		
				3rd Part Bill Qty						**492.30**	2175.19	**1070846.00**

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Sl No	Chainage		Mesurement						Qty	Rate / Unit	Amount
			No.	L	B1	B2	Av.,B	D			
	Measurements Recarded on :										
14	Providing and Fixing pre cast covering Slab 230mm thick made out of CC , Jelly 20mm Down Size with steel reinforcement including form work, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc, complete as per Engineer incharge. (Data Rate)									Cum	
	230 mm Covering Slab										
	NTI Layout 20th Cross road-3rd Main road jun		1	7.00	1.50	1.50	1.50		10.50		
	NTI Layout 20th Cross road-2nd Main road jun		1	8.00	1.50	1.50	1.50		12.00		
	NTI Layout 8th Main road-5th Cross road Jun-1		1	9.40	1.50	1.50	1.50		14.10		
	NTI Layout 8th Main road-5th Cross road Jun-2		1	8.30	1.50	1.50	1.50		12.45		
	NTI Layout 8th Main road-9th Cross road Jun-1		1	7.80	1.50	1.50	1.50		11.70		
	NTI Layout 8th Main road-9th Cross road Jun-2		1	8.00	1.50	1.50	1.50		12.00		
	NTI Layout 7th Cross road-9th Main road Jun-1		1	9.50	1.50	1.50	1.50		14.25		
	NTI Layout 7th Cross road-9th Main road Jun-2		1	8.10	1.50	1.50	1.50		12.15		
				3rd Part Bill Qty					**99.15**	5287.84	**524289.00**

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Sl No	Chainage			Mesurement No.	L	B1	B2	Av.,B	D	Qty	Rate / Unit	Amount
	Measurements Recarded on :											
16	Earth work in surface excavation by mechanical means for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work. In all kinds of soils upto 300 mm depth.											
	Qty as per Premeasurement vide E-MB Page No. 14 to 15 is =									**52.19**	75.06	**3917.00**
17	Scarifying the existing bituminous road surface to a depth of 50 mm and disposal of scarified material by Mechanical Means using Hydraulic excavator with in all lifts and lead											
	Qty as per Premeasurement vide E-MB Page No. 16 is =									**192.05**	4.62	**887.00**
19	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density											
	Qty as per Premeasurement vide E-MB Page No. 17 to 18 is =									**102.05**	2764.54	**282121.00**
20	Providing and applying primer coat with SS1 grade Bitumen Emulsion on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.90 kg per m2 using mechanical means											
	Qty as per Premeasurement vide E-MB Page No. 19 to 20 is =									**443.68**	48.50	**21518.00**
21	Providing and laying Dense Graded Bituminous Macadam with 40/60 TPH capacity HMP using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 4.5 per cent by weight of total mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification clause No. 505 complete in all respects											
	Qty as per Premeasurement vide E-MB Page No. 21 to 22 is =									**27.69**	10553.53	**292227.00**
22	Providing and applying tack coat with RS1 Bituminous Emulsion using emulsion pressure distributor at the rate of 0.25 kg/m2 on the prepared bituminous surface cleaned with mechanical broom											
	Qty as per Premeasurement vide E-MB Page No. 23 is =									**921.89**	16.17	**14907.00**
23	Providing and laying Bituminous Concrete with 40/60 TPH capacity hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 5.4 percent of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade,level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per specification											
	Asphalt Road - IECHS Layout - Shiva temple Road											
	0.00	30.00		1	30.00	4.30	4.60	4.45	0.04	5.34		
	30.00	60.00		1	30.00	4.60	4.30	4.45	0.04	5.34		
	60.00	90.00		1	30.00	4.30	4.40	4.35	0.04	5.22		
	90.00	105.60		1	15.60	4.40	5.10	4.75	0.04	2.96		
	IECHS Layout - 3rd C Cross road from temple road											
	0.00	30.00		1	30.00	4.30	4.50	4.40	0.04	5.28		
	30.00	56.30		1	26.30	4.50	5.10	4.80	0.04	5.05		
	IECHES Layout - 3rd E Cross road from temple road											

Sl No	Chainage			Mesurement					Qty	Rate / Unit	Amount
				No.	L	B1	B2	Av.,B	D			
	0.00	30.00		1	30.00	4.00	4.10	4.05	0.04	4.86		
	30.00	47.00		1	17.00	4.10	4.20	4.15	0.04	2.82		
					3rd Part Bill Qty					**36.88**	12253.37	**451850.00**

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Sl No	Chainage			Mesurement No.	L	B1	B2	Av.,B	D	Qty	Rate / Unit	Amount
	Measurements Recarded on :											
24	Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Bituminous Surface Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 g/ m2 area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35:2015.The finished surface to be level, uniform and free from streaks and holes.											
	IECHS Layout - Shiva temple Road											
	0.00	30.00		2	30.00			0.10		6.00		
	30.00	60.00		2	30.00			0.10		6.00		
	60.00	90.00		2	30.00			0.10		6.00		
	90.00	105.60		2	15.60			0.10		3.12		
	IECHS Layout - 3rd C Cross road from temple road											
	0.00	30.00		2	30.00			0.10		6.00		
	30.00	56.30		2	26.30			0.10		5.26		
	IECHES Layout - 3rd E Cross road from temple road											
	0.00	30.00		2	30.00			0.10		6.00		
	30.00	47.00		2	17.00			0.10		3.40		
					3rd Part Bill Qty					**41.78**	551.98	**23062.00**
30	Loading and Unloading of Stone Boulder / Stone aggregates / Sand / Kankar / Moorum.										Cum	
	Qty Vide Item No. 4									**998.60**	136.26	**136069.00**
31	Cost of Haulage Excluding Loading and Unloading, Case-1 : Surfaced Road A Taking output 10 t load and lead 10 km = 100 t.km										T. Kms	
	Same as Qty Vide Item No. 30									998.60		
	Density of Sand/Debris i.e 1.28 Tonne/Cum			998.60	1.28					**1278.20**	110.86	**141701.00**
											Sub Total =	8188265.00
											Add GST 18% Charges =	1473888.00
											Grand Total =	9662153.00

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